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ABSTRACT

Helping teachers move toward more developmentally appropriate practice in classrooms for young children is a major goal of the early childhood educational profession. However, little is known about factors likely to result in more developmentally appropriate practice (DAP). This study examined the relationship between preschool teachers' engagement in developmentally appropriate practice and teachers' education/academic background, content of their early childhood teacher training, supervised practical experiences, years of employment in child care/education, and perceptions of reflective practices and the most predictive combination of the above variables in meeting NAEYC standards. The sample consisted of 64 teachers of 3-, 4-, and 5-year-olds from 20 licensed child care centers in western New York. The data included teacher scores on the Teacher Information Report and Reflective Teaching Instrument and the scores of teachers' classroom practices as measured by the NAEYC Classroom Observation Scale. Correlation of all identified variables listed above with the dependent variable of DAP were tested using the Pearson-Product moment correlation coefficient. Forward multiple regression procedures were used to determine which of the variables and which combination of those identified predictors contributed most extensively to DAP scores. Findings indicated that teachers' use of reflection, amount of supervised experiences, and content of early childhood teacher training were significantly related to DAP ratings. Among the three predictor variables, teachers' use of reflective teaching was the strongest predictor of DAP. The combination of teachers' use of reflection with the amount of supervised experience maximized the prediction of greater DAP. (Contains 28 references.) (Author/KB)

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RELATIONSHIP BETWEEN TEACHERS' USE OF REFLECTION AND OTHER SELECTED VARIABLES AND PRESCHOOL TEACHERS' ENGAGEMENT IN DEVELOPMENTALLY APPROPRIATE PRACTICE

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Abstract

Helping teachers move toward more developmentally appropriate practice in classroom for young children is a major goal of the early childhood educational profession. However, little is known about factors likely to result in more developmentally appropriate practice. To advance our knowledge in this area, this study examined the relationship between preschool teachers' engagement in developmentally appropriate practice and (a) teachers' education/academic background, (b) content of early childhood teacher training, (c) supervised practical experiences, (d) years of employment in child care/education, (e) perceptions of reflective practice and the most predictive combination of the above variables in meeting NAEYC standards.

The sample consisted of sixty-four teachers of 3-, 4, and 5 year-old children from 20 licensed child care centers in Western New York. The data included teacher scores on the Teacher Information Report and Reflective Teaching Instrument and the scores of teachers' classroom practices as measured by the NAEYC Classroom Observation Scale. Correlation of all identified variables listed above with the dependent variable of DAP were tested using the Peason-Product moment correlation coefficient. Forward multiple regression procedures were used to determine which of the variables and which combination of those identified predictors contributed most extensively to DAP score.

Results indicated that teachers' use of reflection, amount of supervised experiences and content of early childhood teacher training were significantly ($p<.01$) related to DAP ratings. Among the three predictor variables, teachers' use of reflective teaching was the strongest predictor of DAP. The combination of teachers' use of reflection with the amount of supervised experience maximized the prediction of greater DAP. This finding suggested that teachers who

engage in more reflective thought processes and have more supervised experiences are likely to make more developmentally appropriate choices in the classroom. In light of the finding of this study, future research was proposed.

INTRODUCTION

Achievement of DAP standards by programs serving children from birth to age eight is a major goal of the early childhood educational profession. However higher quality programs can not emerge without a teaching force that engages in practices congruent with these guidelines. What are the factors that tend to promote teachers' engagement in more developmentally appropriate practice?

Examination of past theoretical and research literature about the factor indicate that teachers' educational background, supervised teaching experiences and extent of employment experiences appear to be generally related to quality teaching (McCarthy, 1990; Katz, 1984; Spodek, 1990; Powell 1990; NAEYC, 1991; Johnston, 1994; Howes, 1983). In a study examining the effects of specialized education and job experiences on teachers' knowledge of DAP, Snider and Fu (1990) found that the factors having the most effects on early childhood teachers' knowledge of DAP were (1) education/academic degree, (2) the number of content areas covered in early childhood education courses taken, and (3) quality of supervised practical experiences. The investigation further suggested that professional study provides early childhood teachers with information regarding what constitutes developmentally appropriate practice, while supervised practical experience provides the framework in which teachers' actual performance may be advanced and evaluated by supervising child development professionals.

Obviously teachers' specialized early childhood preparation alone may not provide teachers with all they need for planning programs and curricula for young children (Spodek and Brown, 1993). Acting appropriately requires both teachers' knowledge and skills acquired through study, as well as their judgement, assessment, and experience regarding the situation

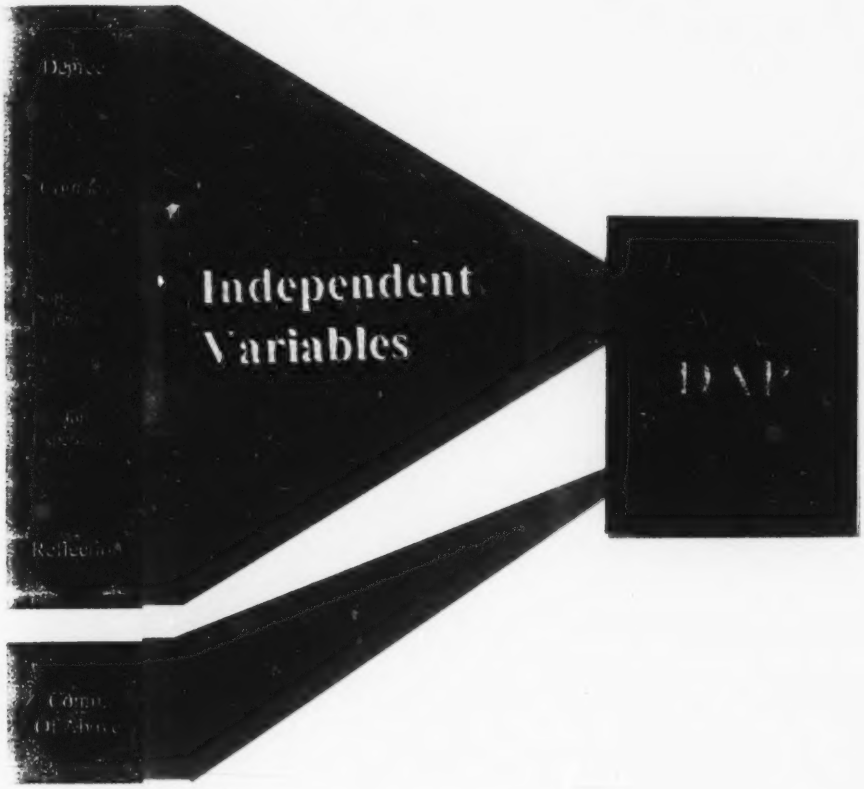
(Richardson, 1990). Quality teaching, therefore, may not be fully understood without studying teachers' thinking processes and their efforts in the provision of appropriate practice.

Reflection as a specialized form of thinking defined by Dewey has been recognized as an influential factor in improving the quality of teaching (Dewey, 1933; Cruickshank, 1987; Bowman, 1989, 1994; Grimmett, 1988). Research on effective teaching indicates that more effective teachers are more often reflective thinkers (Ruddell, Draheim & Barnes, 1990; Bainer and Cantrell, 1991; Moallem, 1993; Gonzalez, 1993). The effective teacher has been identified as the one who has the ability to assess situations and make thoughtful, rational decisions (Bainer and Cantrell, 1991).

The need for early childhood teachers to engage in more reflective practice is receiving support from teacher educators who have incorporated reflective strategies in their teacher preparation programs (Bowman, 1994; Jones, 1986; Duff, Brown and Scoy, 1995). As indicated by Bowman (1994), models for reflective thinking processes such as self study, anecdotal records and collaborative reflection should be widely used in child care centers in order to help teacher make sense and act "appropriately".

Together, teachers' use of reflection and other selected variables appear to be critical factors in teachers' engagement in quality teaching. The present study, therefore will focus on examining the relationship between preschool teacher's actual classroom practice with respect to DAP guidelines and (a) teachers' education/academic background, (b) content of early childhood teacher education, (c) supervised practical experiences, (d) years of employment in child care/education, (e) teachers' perceptions of reflective practice and the most predictive combination of the above variables in meeting NAEYC standards.

VARIABLES



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Subjects

The population of the study consisted of Sixty-four lead teachers of three-, four- and five-year-old children from the child care centers listed by Day Care Association of Western New York. Although centers listed in Day Care Association vary in terms of their sponsorship, they are all licensed by the State of New York.

Measures

The research design for this study was a descriptive, correlational study utilizing survey methodology and classroom observation. The main purpose of the study was to correlate items on a teacher information report and a reflective teaching scale with the assessments of teachers' classroom practice as determined from observation by the research.

A multiple regression analysis was also used to determine the relationship between assessments of teachers' classroom practice and the best combination of the five independent predictor variables.

Three measures were employed to collect the data for this study. The *Teacher Information Report* was adapted from a study conducted by Snider and Fu, 1990. Each participant was asked to indicate, on a list provided, the highest level of education degree, amount of supervised practical experience, number of content areas experienced in child development and early childhood education courses and years of employment in child care/education.

Kirby's *Reflective Teaching Instrument* (1987) was used to assess teachers' perceived engagement in reflective practice. All items included in RTI scale are based on three requirements for reflective practice: diagnosis, testing, and belief in personal causation. There

are 15 items in the scale, including such items as, "I often revise my teaching methods after trying them in a class," and " I sometimes find myself changing instructional strategies in the middle of a class session". Teachers were asked to rate these items on a six-point likert rating scale ranked from strongly disagree to strongly agree. The sum of ratings across items in the scale yields scores ranging from 15 to 90. Higher scores indicate teachers' greater use of reflective teaching practice and lower scores indicate teachers lesser use of reflective teaching practice.

The *Early Childhood Classroom Observation Scale* was also used to assess the quality of young children's experiences in programs seeking accreditation by the National Association for the Education of Young Children (NAEYC, 1985). The criteria address several early childhood program components: interactions among staff and children, curriculum, environment, Health and Safety and Nutrition. Bredekamp (1986) reported established construct validity and reliability on this instrument. How well the classroom meets each criterion was assessed by assigning a rating. Each criterion was rated on a 3-point scale, with 3 meaning that the criterion was fully met, 2 meaning the criterion was partially met, and 1 meaning the criterion was not met.

Procedures

A systematic random sample was drawn from the list of all 65 centers in the Day Care Association of Western New York. A letter explaining the purpose of the study and a request for the participation of teachers was then mailed to the administrators of centers. Phone calls to some of the administrators were also made for the same purpose. Twenty centers responded and sixty-four teachers were involved in the study. Following approval from the administrator, a date for

the classroom observation portion of the study was scheduled. The investigator prepared and delivered the instruments to each o of the participating centers. The investigator greeted the teachers being observed and briefly explained directions for completing the instruments. Each teacher received a cover letter assuring anonymity and expressing appreciation for participation in the study. Next, the investigator, an NAEYC-trained valuator, observed each teacher for about an hour using the Early Childhood Classroom Observation Scale. Following observation, the teacher completed the Teacher Information Report and the Reflective Instrument.

Findings

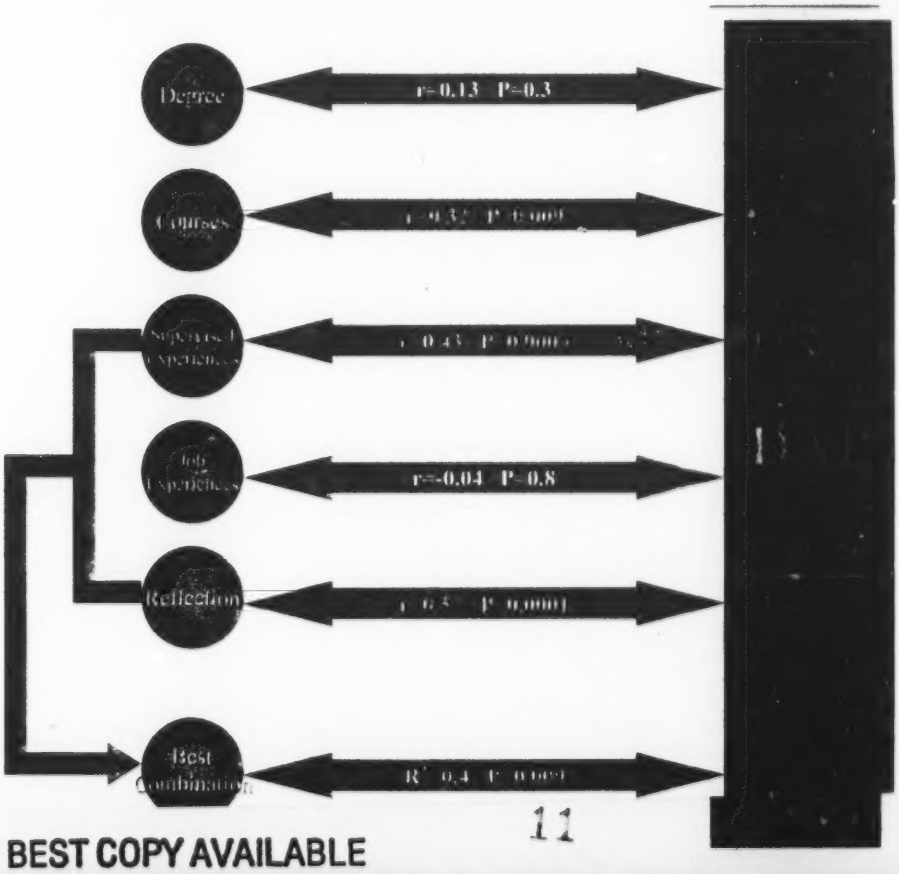
Findings revealed that teacher's level of education degree scores were not significantly related to their DAP scores (r=.13, p<. 01). In addition, The correlation between teachers' length of employment and their engagement in DAP was r=-. 04 and not statistically at p<. 01. Thus, teachers' length of employment was not associated with their engagement in DAP as measured by Classroom Observation Scale. The variables found to have significant relationships with DAP were teachers' use of reflection (r=57, P<. 01), amount of supervised experienced (r=. 43. p<. 01) and number of content areas included in CD/ECE courses (r=. 32 (p<. o1).

The last research question dealt with identification of the variable which was the best predictor of teacher's engagement in DAP and the combination of variables maximizing the prediction of DAP. Results revealed variables of "Courses" and "Degree" were not included in the analysis since their inclusion in the regression equation did not improve the total predictability at a significant level. Among the remaining two variables in the model, teachers' use of reflection had the strongest relationship to the score gained on DAP. Supervised experience also contributed significantly, but to a lesser extent, to the prediction of DAP. The

combined effect of these two independent variables had been able to explain about 40% of the variation of DAP scores.

On the basis of the results presented here, it is possible to conclude that teacher's use of reflection, amount of supervised experiences and content of early childhood teacher training were significantly ($p<.01$) related to DAP ratings. Among the three predictor variables, teachers' use of reflective teaching was the strongest predictor of DAP. The combination of teachers' use of reflection with the amount of supervised experience maximized the prediction of greater DAP. This finding suggested that teachers who engage in more reflective thought processes and have more supervised experiences are likely to make more developmentally appropriate choices in the classroom.

CORRELATIONS OF ALL VARIABLES



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DISCUSSION

Data reported in this study suggested that teachers most likely to engage in more appropriate practices were those with more course work in child development, those who engaged in more reflective thought processes and those who had a supervised practical training exercise. While professional study provides early childhood teachers with information regarding what constitutes developmentally appropriate practice, supervised practical experience provides the framework in which teachers' actual performance may be advanced and evaluated by supervising child development professionals. As a result of receiving direct feedback regarding their performance, teachers may become more aware of the areas in which they need to change, grow and improve, and, therefore, become more amenable to behavior changes associated with sound professional practice.

Among the three variables significantly related to DAP, teachers' use of reflection seemed more salient than any of the other variables. The stronger relationship between the reflection and DAP may have resulted from the nature of these two variables. Developmentally appropriate practice required teachers to engage in practices which better reflect what is known about how children develop and practices that are more sensitive to individual a cultural diversity. To reach such a goal, teachers must make constant efforts to make sense of what is happening to children and frequently consider underlying assumptions and implications when analyzing classroom practices. Without making such an effort, a teacher will never understand what development truly means and then be able to make appropriate decisions. Reflection as an ability to assess situations and to make thoughtful, rational decisions seems essential in facilitating movement toward increased developmental appropriateness. Sense-making or

meaning-making processes as the major attribute of reflection can empower teachers to question, to think, to move beyond the uncritical acceptance of any knowledge and to act appropriately.

Finally, teachers' employment experiences and teacher's degree have commonly been considered by parents as important elements in selecting quality childcare. However, there was not enough evidence in this study to demonstrate a significant relationship between DAP and these two variables. The results may imply that teaching is a complex, dynamic human activity involving interaction of many variables. The amount of education or work experience alone may not provide a teacher with a framework for understanding what constituted developmentally appropriate practice. Thus, "more" education and "more years" of employment may not necessarily lead to the "better" teaching practice.

Several implications can be drawn from this study. First, teacher preparation programs need to help student teachers become more reflective. Teachers need to be more aware of teaching as an activity that occurs in an uncertain environment in which there are generally few absolutes and few answers are quarantined to work every time with every child. Acting more appropriately requires teachers to constantly attempt to make sense of what is happening to children and frequently consider underlying assumptions and implications when analyzing classroom practices. In these teacher preparation programs, models and strategies for thoughtful inquire must be learned in order to help teachers foster an inquiry-oriented attitude and promote the ability to analyze, to structure and to devise more creative solutions. Second, schools and centers also need to encourage reflection. Strategies such as diaries, anecdotal records, staff meetings, case consultation, supervisory feedback and problem solving conferences need to be used. Such techniques, as pointed by Bowman (1994), can help teachers determine for themselves and with their colleagues, supervisors, and experts the meaning of their own behavior

and that of the children and family with whom they work. It is through such meaning -making processes that teachers are able to truly grasp the meaning of "appropriateness". Third, given the high rate of turnover among child care providers, the relationship between DAP and selected variables may assist administrators in selecting staff members who are more likely to engage in appropriate practices. Date reported in this study suggest that teachers most likely to engage in more appropriate practices were those with more course work in child development, those who had a supervised practical training experience. Therefore, in selecting potential staff members, decisions should be based on child-related education and supervised practical experience than formal degrees outside of Early Childhood Education/Child Development and work experience in child care. Finally, the instruments used in this study seem to be helpful in providing data regarding teachers' provision of quality teaching. The Reflective Teaching Instrument for example, took about five minuets to administer. Given this information, it might be useful for prospective employers to use this instrument in conjunction with interviews and other teacher selection procedures.

Future studies in this area might now wish to replicate this study examining other variables worthy of increased study. Also needed are studies to better identify which content areas and what amount of supervised experiences have statistically significant effects on teachers' engagement in more DAP. Finally, both forward and backward stepwise and all other possible assessment procedures should be carried out in order to consider alternative models and to examine the performance of the variables in different models.

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